



# **WHAT'S NEW IN NRC MODEL VERSION 2.2**

## **1. REORDERED ELEMENT LIST**

NRC Elements have been reordered so that “Disconnect” Elements follow the “Connect” Element of the same type.

## **2. RENAMED STEPS**

Many of the steps within the model have been renamed for consistency.

## **3. NEW VARIABLE NAMES**

**CO Staffed Percentage** - this variable was called ‘CO Staffed - Unstaffed Ratio’ in NRCM Version 2.1.

## **4. CHANGE IN DEFAULT VALUE**

**Setup Time (in minutes)** - the default value has increased from 5 to 10 minutes in NRCM Version 2.2.

## **5. SAVE BATCH RUN**

The save batch run now saves a macro “button” that will print out the run as it does within the model itself.

## **6. VISUAL BASIC CODE**

The code within the model has been rearranged and documented.

## **7. BATCH RUN ORDER**

The “pop up” windows are in a more logical sequence - after you select the state / company you now get the labor rate window next rather than be asked to exclude service types.

## **8. CLEAR OUTPUT BUTTON**

The clear output button is improved to clear the “element selection” on the process and calcs sheet.

## **9. SPINNER INPUT**

Some of the spinner input boxes did not accept direct input that is now fixed.

## **10. TRAVEL TIME**

Travel time within the CO is now “hard-coded” as 10 minutes. Travel time to the non staffed CO is still 20 minutes.

## **11. REMOVAL OF TIMES**

The times (minutes) have been removed from those activities / steps that have ‘CPU Time’ associated with them.

## 12. RENAMED NRC ELEMENTS

The development team changed the names of the following NRC elements in the latest version of the model:

New Element Name	Old Element Name
2 Wire Migration at the FDI	2 Wire Cross Connect at the FDI - Migration
4 Wire Migration at the FDI	4 Wire Cross Connect at the FDI - Migration
2 Wire Migration at 6 line NID	2 Wire Cross Connect at 6 line NID - Migration
DS1 Interoffice Transport Install	DS1 Interoffice Transport
DS3 Interoffice Transport Install	DS3 Interoffice Transport
Fiber Cross Connects Install (LGX)	Fiber Cross Connects - Install
Fiber Disconnect (LGX)	Fiber Cross Connects - Disconnect
SS7 STP message transfer part 'A Link' only (port) Install	SS7 STP message transfer part 'A Link' only - Install
SS7 STP message transfer part 'A Link' only (port) Disconnect	SS7 STP message transfer part 'A Link' only - Disconnect

## 13. ADDITIONAL NRC ELEMENTS

The development team added the following five NRC elements to the model:

- DS1 Interoffice Transport Disconnect
- DS3 Interoffice Transport Disconnect
- DS3 Loop to Customer Premise Migration
- DS3 Loop to Customer Premise Install
- DS3 Loop to Customer Premise Disconnect

Currently, there are 49 Elements in NRCM Version 2.2.

**NOTE: Descriptions for the Element Types listed below refer to the Non-Recurring Cost Model (NRCM) Version 2.2.**

### **Element Type 1: POTS / ISDN BRI Migration (TSR)**

Process Flow / Activity steps remained the same.

### **Element Type 2: POTS / ISDN BRI Install (TSR)**

Process Flow / Activity steps remained the same.

**Element Type 3: POTS / ISDN BRI Migration (UNE Platform)**

Process Flow / Activity steps remained the same.

**Element Type 4: POTS / ISDN BRI Install (UNE Platform)**

Process Flow / Activity steps remained the same.

**Element Type 5: POTS / ISDN BRI Disconnect (TSR / UNE-Platform)**

Step 19: *SWITCH inventories as spare and shows available for re-assignment (equipment and facility)* - is an additional step. However, the addition of this step does not affect price.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

**Element Type 6: POTS / ISDN BRI Migration (UNE-Loop)**

Process Flow / Activity steps remained the same.

**Element Type 7: POTS / ISDN BRI Install (UNE-Loop)**

Process Flow / Activity steps remained the same.

**Element Type 8: POTS / ISDN BRI Disconnect (UNE-Loop)**

Process Flow / Activity steps remained the same.

**Element Type 9: Feature Changes**

Process Flow / Activity steps remained the same.

**Element Type 10: 4 Wire Migration (UNE-Loop)**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 120: *Negotiate customer release (CLEC to ILEC)* - the time has decreased from 20 minutes to 15 minutes.

**Element Type 11: 4 Wire Install (UNE-Loop)**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

Step 83: *NCTE installation & testing* - the time is 2 minutes in NRCM Version 2.2.

The cost associated with this step is recovered via recurring rates.

#### **Element Type 12: 4 Wire Disconnect (UNE-Loop)**

*COE and CFA spare and available for reassignments are made* - has been eliminated.

However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 123 - *NTEC contacts SSC to verify valid disconnect* - is an additional step.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

#### **Element Type 13: 2 Wire Migration at the FDI**

Key driver of the cost differential is the following:

- Step 101: *Setup time / 2 work activities* - the time has increased from 5 minutes to 10 minutes.
- Step 104: *Tear down setup / 2 work activities* - the time has increased from 5 minutes to 10 minutes.

#### **Element Type 14: 2 Wire Disconnect at the FDI**

Key driver of the cost differential is the following:

- Step 105: *Setup time / 2 work activities* - the time has increased from 5 minutes to 10 minutes.
- Step 108: *Tear down setup / 2 work activities* - the time has increased from 5 minutes to 10 minutes.

#### **Element Type 15: 4 Wire Migration at the FDI**

Key driver of the cost differential is the following:

- Step 69: *Travel time to FDI / 1 work activities* - the probability now reflects 100%.
- Step 110: *Negotiate customer release (CLEC to ILEC)* - the time has decreased from 20 minutes to 15 minutes.
- Step 111: *Setup time / 1 work activity* - the time has increased from 5 minutes to 10 minutes.
- Step 113: *Tear down setup / 1 work activity* - the time has increased from 5 minutes to 10 minutes.

Step 65: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %: "R"* - the time has decreased from 20 minutes to 10 minutes.

#### **Element Type 16: 4 Wire Disconnect at the FDI**

Key driver of the cost differential is the following:

- Step 69: *Travel time to FDI / 1 work activities* - the probability now reflects 100%.
- Step 116: *Setup time / 2 work activities* - the time has increased from 5 minutes to 10 minutes.
- Step 118: *Tear down setup / 2 work activities* - the time has increased from 5 minutes to 10 minutes.
- Step 124: *SS I&M OSP contacts SSC to verify valid disconnect* - is an additional step.

#### **Element Type 17: 2 Wire Migration at 6 line NID**

Key driver of the cost differential is the following:

- Step 159: *Setup time / 1 work activity* - the time has increased from 5 minutes to 10 minutes.
- Step 162: *Tear down setup / 1 work activity* - the time has increased from 5 minutes to 10 minutes.

#### **Element Type 18: Channelized DS1 Virtual Feeder to RT Install**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 67: *Travel time within the staffed central office: CO staffed / # orders per trip* - the time has decreased from 20 minutes to 10 minutes.
- Step 188: *Retrieve and analyze performance monitoring data* - the cost associated with this step is now recovered via recurring rates.

#### **Element Type 19: Channelized DS1 Virtual Feeder to RT Disconnect**

*COE and CFA spare and available for reassignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 67: *Travel time within the staffed central office: CO staffed / # orders per trip* - the time has decreased from 20 minutes to 10 minutes.

Step 37: *OPS/INE delivers disconnect message to INE* - the probability now reflects 100%. However the cost associated with this step is recovered via recurring rates.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

**Element Type 20: DS1 Interoffice Transport Install**

Key driver of the cost differential is the following:

- Step 188: *Retrieve and analyze performance monitoring data* - the cost associated with this step is now recovered via recurring rates.

**Element Type 21: DS1 Interoffice Transport Disconnect**

The following NRC element type has been added to NRCM Version 2.2.

**Element Type 22: DS3 Interoffice Transport Install**

Key driver of the cost differential is the following:

- Step 174: *Retrieve and analyze performance monitoring data* - the cost associated with this step is now recovered via recurring rates.

**Element Type 23: DS3 Interoffice Transport Disconnect**

The following NRC element type has been added to NRCM Version 2.2.

**Element Type 24: 2 Wire Loop, different CO Migration**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 120: *Negotiate customer release (CLEC to ILEC)* - the time has decreased from 20 minutes to 15 minutes.
- Step 131: *Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)* - the time has decreased from 3 minutes to 1.50 minutes.

**Element Type 25: 2 Wire Loop, different CO Install**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 131: *Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)* - the time has decreased from 3 minutes to 1.50 minutes.

**Element Type 26: 2 Wire Loop, different CO Disconnect**

*COE and CFA spare and available for reassignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- *Remove cross connect (COSMIC - like frame, e.g. punch-down, 2 four wire jumpers)* - this step has been deleted from NRCM Version 2.2.
- Step 132: *Remove (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)* - the time has decreased from 3 minutes to 1.50 minutes.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

**Element Type 27: 4 Wire Loop, different CO Migration**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 120: *Negotiate customer release (CLEC to ILEC)* - the time has decreased from 20 minutes to 15 minutes.

**Element Type 28: 4 Wire Loop, different CO Install**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

**Element Type 29: 4 Wire Loop, different CO Disconnect**

*COE and CFA spare and available for reassignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:



- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- *Remove cross connect - Wire Wrap to AD4 Channel Bank (ADTS) / unitized SMAS* - this step has been deleted from NRCM Version 2.2.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

### **Element Type 30: DS1 Loop to Customer Premise Migration**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 66: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 120: *Negotiate customer release (CLEC to ILEC)* - the time has decreased from 20 minutes to 15 minutes.

### **Element Type 31: DS1 Loop to Customer Premise Install**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 66: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

### **Element Type 32: DS1 Loop to Customer Premise Disconnect**

*COE and CFA spare and available for reassignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 66: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

**Element Type 33: DS3 Loop to Customer Premise Migration**

The following NRC element type has been added to NRCM Version 2.2.

**Element Type 34: DS3 Loop to Customer Premise Install**

The following NRC element type has been added to NRCM Version 2.2.

**Element Type 35: DS3 Loop to Customer Premise Disconnect**

The following NRC element type has been added to NRCM Version 2.2.

**Element Type 36: Line Port (DS0, Analog, ISLU) Install**

Process Flow / Activity steps remained the same.

**Element Type 37: Line Port (DS0, Analog, ISLU) Disconnect**

Process Flow / Activity steps remained the same.

**Element Type 38: Channelized DS1 line port (TR-303-IDT) Install**

Key driver of the cost differential is the following:

- Step 67: *Travel time within the staffed central office: CO staffed / # orders per trip* - the time has decreased from 20 minutes to 10 minutes.

**Element Type 39: Channelized DS1 line port (TR-303-IDT) Disconnect**

Process Flow / Activity steps remained the same.

**Element Type 40: Fiber Cross Connects Install (LGX)**

Key driver of the cost differential is the following:

- Step 67: *Travel time within the staffed central office: CO staffed / # orders per trip* - the time has decreased from 20 minutes to 10 minutes.

**Element Type 41: Fiber Disconnect (LGX)**

Key driver of the cost differential is the following:

- Step 67: *Travel time within the staffed central office: CO staffed / # orders per trip* - the time has decreased from 20 minutes to 10 minutes.

**Element Type 42: SS7 Links (DS0) Install**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

#### **Element Type 43: SS7 Links (DS0) Disconnect**

*COE and CFA assignments are made* - has been eliminated. However, the deletion of this step does not affect price.

Key driver of the cost differential is the following:

- Step 64: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

#### **Element Type 44: SS7 Links (DS1) Install**

Key driver of the cost differential is the following:

- Step 66: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.
- Step 188: *Retrieve and analyze performance monitoring data* - the cost associated with this step is now recovered via recurring rates.

#### **Element Type 45: SS7 Links (DS1) Disconnect**

Key driver of the cost differential is the following:

- Step 66: *Travel time within the staffed central office: CO staffed / # orders per trip \* Copper %* - the time has decreased from 20 minutes to 10 minutes.

*TIRKS provides equipment and facility assignments* - has been eliminated. However, the deletion of this step does not affect price.

Step 44: *TIRKS inventories as spare and shows available for re-assignment (equipment & facility)* - is an additional step. However, the cost associated with this step is recovered via recurring rates.

#### **Element Type 46: SS7 STP global title translations 'A Link' only Install**

Process Flow / Activity steps remained the same.

#### **Element Type 47: SS7 STP global title translations 'A Link' only Disconnect**

Process Flow / Activity steps remained the same.

**Element Type 48: SS7 STP message transfer part ‘A Link’ only (port) Install**

Process Flow / Activity steps remained the same.

**Element Type 49: SS7 STP message transfer part ‘A Link’ only (port) Disconnect**

Key driver of the cost differential is the following:

- Step 197: *Insert translations to place in an out-of-service and available state* - the time has decreased from 5 minutes to 4 minutes.